<u>District I</u> 1625 N French Dr , Hobbs, NM 88240 <u>District II</u> 1301 W Grand Avenue, Artesia, NM 88210					State of New Mexico Energy Minerals and Natural Resources					Form C-101 May 27, 2004				
District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505					1220 South Ste Francis Dr					nit to appropriate District Office				
	APPLICATION FOR PERMIT TO DRILL, RE-E							ENTER, DEFIREN, PLUCBACK OR ADD A ZONE						
¹ Operator Name and Address Samson Resources Company 200 N. Loraine Street, Ste 1010						12		20165	² OGRID Numb	oer				
Midland, TX 79701						API Number 486								
³ Property Code 36534				-	Property Osudo 33 St			••• • • • •	[°] Well No					
9			⁹ Proposed Pool 1			¹⁰ Proposed Pool 2								
Osudo; Morrow				, 20	⁷ Surface	Osudo; Wolfcamp								
UL or lot no	Section	Township	Range	Lot		Location	South line	Feet from the	East/West line	County				
M	33	208	36E				outh	660	West Me	Lea				
r	····		⁸ Propo	sed Bott	om Hole Loca	tion If Differe	nt From	Surface						
UL or lot no	Section	Township	Range	Lot	Idn Feet fr	om the North/S	South line	Feet from the	East/West line	County				
L	I	1	<u>l</u>	Ad	lditional We	ell Informati	on	x						
•	¹¹ Work Type Code NW					e/Rotary R	Rotary ¹⁴ I		¹⁵ Gro	¹⁵ Ground Level Elevation 3611'				
	¹⁶ Multiple ¹⁷ Proposed Depth N 11650'			oth	1	mation w Sand	¹⁹ Contractor			²⁰ Spud Date				
Depth to Grou				Distanc	tance from nearest fresh water well			Distance from	nearest surface v	face water				
Pit: Liner Synthetic 12 mils thick Clay Pit Volume: 20000 bbls							5 miles Drilling Method							
Close	ed-Loop Sys	stem 🔲				<u>F</u>	resh Water	Brine Die	sel/O11-based	Gas/Aır				
²¹ Proposed Casing and Cement Program														
Hole S	Hole Size Casing Size				g weight/foot		Setting Depth		ment	Estimated TOC				
······································			3.375		48	400		300		0				
<u> </u>		7.625 7		40	517:		3150		<u> </u>					
6.125		<u>├</u> ───			11.6	1165		Log Cali		10,400				
²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone Describe the blowout prevention program, if any. Use additional sheets if necessary. Permit Expires 1 Year From Approval Date Unless Drilling Underway Samson proposes to drill and test the Morrow formations. Approximately 1875' of surface casing will be set/cemented. If commercial, intermediate/production casing will be run/cemented, will perforate/stimulate as needed for production. MUD PROGRAM: 0-1875' Fresh Water 1875'-5175' Cut Brine 5175'-10500' Cut Brine 10500'-11650' Cut Brine														
PROPOSED BOP PROGRAM: Shaffer Double Ram, 10000 psi Working Pressure, 5000 psi, Test Pressure.														
best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines [], a general permit [], or an (attached) alternative OCD-approved plan [].						Approved by								
Printed name. Duke Roush Duch -				To	nish	Title 🗙	OC DISTRICT SUPERVISOR/GENERAL MANAGER							
Title: Landman						Approval Date: AUG - 2 2007 Expiration Date:								
E-mail Addre	E-mail Address droush@samson com							<u></u>						
Date: July 27, 2007 Phone: (432) 683-7063					Conditions of Approval Attached									





				VI	CI	NIT	'Y	MA	P		193031.	-1234 A.	56	109 101112 13/2
										(53/5	Al	JG 2007. ¹	,	91011
	27	26	25	30	29	28	27	26	æ	30 12 51. 322		COIVO Hodes Imonume	и 1	11213
	34	35	36	31 T_19_S	32 CH	H46 LDDE 33	34	35 CHILDR	ESS 36 H46	14H 31 .	Revisioned to Revisioned to Revisioned to Cook	33 BILLY VA	HED AL	\$./
	3	2	1	T 20 S 6	5	4	3	2	1	6	21. S	4 H45		
	10	11	12	7	8	9	10	11	MADDOX	4 7 7	8	9	10	Ð
	15	14	13	18	17	16	15	14	13	18	17	16	15	
	22	23	24	- 19	20	zı	22	ಚ	24	19	20	21	25	
	27	26	30 25 25 25	≊ 87 30 ∝ ATE COM	29	28	27	TUFFY 26	200PER		29 MADDOX		27 LL	NDRTH
	34	35	36	31			34 T 20 S	35	36 ⁸	83 26 23 24	32	8 ST. 8	34	1.
3	5	1	6	5	•	3	T 21 S 2	1	E31 6		<u>ST. 1</u>	25 25 CURF E36	3 8Y	
Pe	ľ	SIMS E35 12	7 En Al	,01 ⁴ 8	9	10	11	15	7	KILY ، دعا	кі			
15	14	13	SIMUN	17	16	15	14	ST. 1	18 76	E31 21 CULF	E: 16 ST. 17	ند الم 76		
22	23	24	E C-32 E SAN	19 <u>20</u>	a	22	23	24	ы 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	WEAVER E21 03	21	ST. 8 22		
27	26	25	R 35 R 35	30 29	28	27	26	25		29	28	27		
									SCA	ALE: 1"	= 2	MILES		

SEC. 33 TWP. 20-S RGE. 36-E SURVEY_____N.M.P.M. COUNTY___LEA__STATE_NEW_MEXICO

DESCRIPTION 660' FSL & 660' FWL

ELEVATION <u>3611'</u>

OPERATOR SAMSON RESOURCES LEASE OSUDO 33 STATE COM #1





SCALE: 1'' = 2000'

SEC. <u>33</u> TWP.<u>20–S</u> RGE. <u>36–E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>LEA</u> STATE <u>NEW MEXICO</u> DESCRIPTION <u>660'</u> FSL <u>& 660'</u> FWL ELEVATION <u>3611'</u> OPERATOR <u>SAMSON RESOURCES</u> LEASE <u>OSUDO 33 STATE COM</u> U.S.G.S. TOPOGRAPHIC MAP MONUMENT SOUTH, N.M. CONTOUR INTERVAL: MONUMENT SOUTH, N.M. – 5'



District II Energy Mit 1301 W Grand Avenue, Artesia, NM 88210 District III District III 000 Rio Brazos Road, Aztec, NM 87410 Oil (District IV 1220 1220 S St Francis Dr., Santa Fe, NM 87505 Satesting	anta Fe, NM 87505							
Pit or Below-Grade Tank Registration or Closure								
Operator: Samson Resources Co. Telephone: (432 Address: 200 N Loraine St., Suite 1010 Facility or well name: Osudo 33 State Com #1 API # 3 County: Lea Latitude 32 52'40 Surface Owner: Federal [] State [X] Private [] Indian []	<u>) 683-7063</u> e-mail address: <u>Midland, TX, 79701</u> O-035- 3840 U/L or Qtr/Qtr <u>M</u> S 44" NLongitude103 36'53.21	ec <u>33</u> T <u>20S</u> R <u>36E</u>						
Pit Type Drilling ⊠ Production □ Disposal □ Workover □ Emergency □ Lined ⊠ Unlined □ □ Liner type. Synthetic ⊠ Thickness 12/20 mil Clay □ Pit Volume 10,000+bbl	Below-grade tank Volume:bbl Type of fluid' Construction material: Double-walled, with leak detection? Yes If							
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points) ⊠						
Wellhead protection area (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) 🖾						
Distance to surface water (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) ⊠						
If this is a pit closure: (1) Attach a diagram of the facility showing the pit's your are burying in place) onsite ⊠ offsite □ If offsite, name of facility_remediation start date and end date. (4) Groundwater encountered: No □ Y (5) Attach soil sample results and a diagram of sample locations and excavat	. (3) Attach a gener	al description of remedial action taken including						
I hereby certify that the information above is true and complete to the best of has been/will be constructed or closed according to NMOCD guidelines. Date:July 26, 2007 Printed Name/TitleDuke Roush/Landman Your certification and NMOCD approval of this application/closure does no otherwise endanger public health or the environment. Nor does it relieve th regulations.	s ⊠, a general permit □, or an (attached) alter 	rnative OCD-approved plan \Box .						
Approval: Printed Name/Title <u>CHRIS WILLIAMS DIST. SUPU</u>	Signature China alle	ann Date 8/2/07						

i